Cambridgeshire County Council

PETERBOROUGH CITY COUNCIL

RECAP Waste Management Design Guide

Supplementary Planning Document

Adopted TBC

recycle for Cambridgeshire and Peterborough

RECAP
www.recap.co.uk

Contents

1.0 Introduction

Document Title: RECAP Design Guide Supplementary Planning Document.

Document Type: Supplementary Planning Document.

Date Adopted: To be confirmed.

Adopted by: [Cambridgeshire County Council and Peterborough City Council?]

Geographic Extent: [County of Cambridgeshire and City of Peterborough?]

Summary of Document:

The RECAP Design Guide Supplementary Planning Document has been produced by Greater Cambridgeshire Shared Waste Services on behalf of RECAP and provides guidance in relation to waste management in new developments and redevelopments of a residential, commercial or mixed (residential and commercial) nature in [Cambridgeshire and Peterborough?]. It is to be used by developers and designers to ensure effective segregation, storage and collection of waste materials; and Planning Authorities in assessing each planning application to ensure that waste management needs are adequately addressed.

This Guidance expands on 'Policy 14: Waste Management Needs Arising from Residential and Commercial Development' of the Cambridgeshire and Peterborough Minerals and Waste Local Plan (2021) (and any superseding policy). The Cambridgeshire and Peterborough Minerals and Waste Local Plan forms part of the Development Plan for Cambridgeshire and Peterborough and is used in the determination of planning applications.

Notices:

On adoption the RECAP Design Guide Supplementary Planning Document [Date] supersedes (replaces) the RECAP Design Guide Supplementary Planning Document (February 2012)

Copyright Notices:

[Any copyright notices required for maps, images, council copyright, if required.]

[**ISBN**: If appliable]

Website: [Website address]

Contact: [For more information contact]

1.1 Background

This guide has been prepared by Greater Cambridge Shared Waste Service (GCSWS) on behalf of RECAP The Cambridgeshire and Peterborough Waste Partnership. The purpose of this guide is to provide information for developers and designers about what to consider when planning and designing new developments, and the minimum requirements needed to achieve effective waste storage and collections following completion and occupation of sites.

1.2 Consultation

It is essential that developers consult with the Waste Collection Authority (WCA) as early as possible in the planning process to ensure that waste and recycling provision meets both the needs of residents and the waste collection service. Experience has shown that the best approach when planning waste requirements for large developments is for WCA to meet with designers and developers as early as possible in the planning process and review the proposed design for the project. Developers should request a meeting by email and meetings where possible can be organised virtually.

Contact information for requesting a meeting can be found in **Appendix F.**

1.3 Developers minimum standards checklist

We require the designer to complete and submit the **'Developers minimum standards checklist' Appendix G** within this document to accompany planning applications and ensure you avoid delays with the planning process.

1.4 Planning Conditions

Section 70(1)(a) of the Town and Country Planning Act 1990 enables the local planning authority to grant planning permission to impose "such conditions as they think fit". This power needs to be interpreted in light of material considerations such as the National Planning Policy Framework, this supporting guidance on the use of conditions, and relevant case law.

Paragraph 55 of the National Planning Policy Framework makes clear that planning conditions should be kept to a minimum, and only used where they satisfy the following tests:

1. necessary;
2. relevant to planning;
3. relevant to the development to be permitted;
4. enforceable;
5. precise; and
6. reasonable in all other respects.

These are referred to as the six tests, and each of them needs to be satisfied for each condition which an authority intends to apply.

Rigorous application of the six tests can reduce the need for conditions and it is good practice to keep the number of conditions to a minimum wherever possible. Early engagement and positive dialogue between the local planning authority and the developer can also result in planning permission being granted with fewer waste conditions attached.

Effective pre-application discussions can help to establish early in the process what may need to be the subject of conditions.

A Planning Performance Agreement can be used to set a timetable for when discussions about conditions will take place.

1.4 Recycling guidance

In addition to this guide, we encourage designers and developers to consider the recommendations within BS5906:2005, which outlines the need to separate waste for the purposes of recycling. In section four it sets out the general principles of the design of facilities, stating that designers should consider:

- Easy and safe access for waste producers, including older persons or those with disabilities
- Easy and safe access for collectors and collection vehicles
- Location and space (including avoidance of opportunity to cause nuisance or injury)
- Protection against animal scavenging of waste
- Aesthetics of the development
- Noise (e.g. glass handling/collection) and sound insulation
- Ease of maintenance, including cleaning
- Robust construction
- Safety from fire risk and smoke
- Lighting
- Ventilation
- Special requirements (e.g. separate storage and collection of healthcare waste and bulky items)

1.5 Supporting our circular economy strategy (Simpler Recycling in England)

The Environment Act 2021 has now come into force. The legislation makes it mandatory for all local authorities to collect prescribed materials for recycling including paper, card, glass, cans and plastic packaging.

It will also be mandatory for businesses to arrange collections of separate food waste weekly from 1st April 2025. There is an exemption for companies employing fewer than 10 people, who will have until April 2027 to comply with the legislation.

WCAs will be required to collect separate food waste weekly from domestic properties from 1st April 2026.

Simpler recycling will make a significant step towards meeting our ambition to recycle 65% of municipal waste by 2035, and deliver greenhouse gas emissions saving the equivalent to £11.8 billion.

1.6 The impact of changes for large developments

The designer and developers should consider the impact of the proposed changes should they become legislation, and as further information becomes available, work towards accommodating them when planning and designing new developments.

Further information about the Resources and waste strategy can be

viewed here: Resources and waste strategy for England - GOV.UK (www.gov.uk)

1.7 Section 106 contributions:

A S106 financial contribution is a sum of money secured against the landowner of a development by way of an agreement or undertaking (pursuant to section 106 of the Town and Country Planning Act 1990) and payable to a local planning authority so as to facilitate the grant of planning permission for a development.
Typically, S106 funds for waste are secured for:

- Bins - traditional or underground
- Skips for temporary increase in waste during occupation.
- Vehicles - collection vehicles are required as a result of the development.
- Provision of additional bring sites if required.

Developers are required to provide additional Bring Sites and upgrade existing facilities in the locality in accordance with planning leaflets Circular 05/05 or as required as part of the Community Infrastructure Levy, pay financial contributions to the relevant Local Authority for provision or upgrade. The choice will be dependent on an assessment by the developer of the need for such facilities and the impact of the development on existing infrastructure.

1.8 Building Regulations 2010

Developments must comply with Approved Document H of The Building Regulations 2010 (as amended) Drainage and Waste Disposal-H3. Section H6 Solid Waste, the functional requirement states:

> H6. (1) Adequate provisions shall be made for the storage of solid waste.
> (2) Adequate means of access shall be provided:
> (a) for people in the building to the place of storage; and
> (b) from the place of storage to a collection point (where one has been specified by the waste collection authority under Section 46 (household waste) or Section 47 (commercial waste) of the Environmental Protection Act 1990 (a) or to a street (where no collection point has been specified).
>
> It is essential to liaise at the earliest stage with the relevant waste collection authority regarding proposals to ensure designs meet the required standards.

2.0 Overview

2.1 Residential developments

The designer and developers are required to provide adequate internal and external storage for waste, based on figures outlined in this document and fund such provisions where additional costs will be incurred by the WCA.

2.2 Waste storage areas

Storage areas should be accessible to all users and should not present an unnecessary health and safety risk. The method of transit of waste to a storage point will depend upon the type of development.
For single houses it will typically be residents transferring their waste to containers located within the boundaries of their property.
In developments of flats and apartments residents will usually transfer their waste to communal bins, or a facilities management service.
The developer should make adequate arrangements for the management and maintenance of all communal waste transit and storage infrastructure in all developments of flats and apartments.

2.3 Waste management for flats and apartments

Managing waste is challenging and various options are open to a developer beyond the provision of hard infrastructure and typical methods of collection. Waste management in flats and apartments requires an integrated approach and innovation is welcomed. Further guidance is provided in the section entitled ‘Waste collection service for flats and apartments.’

2.4 Waste storage systems

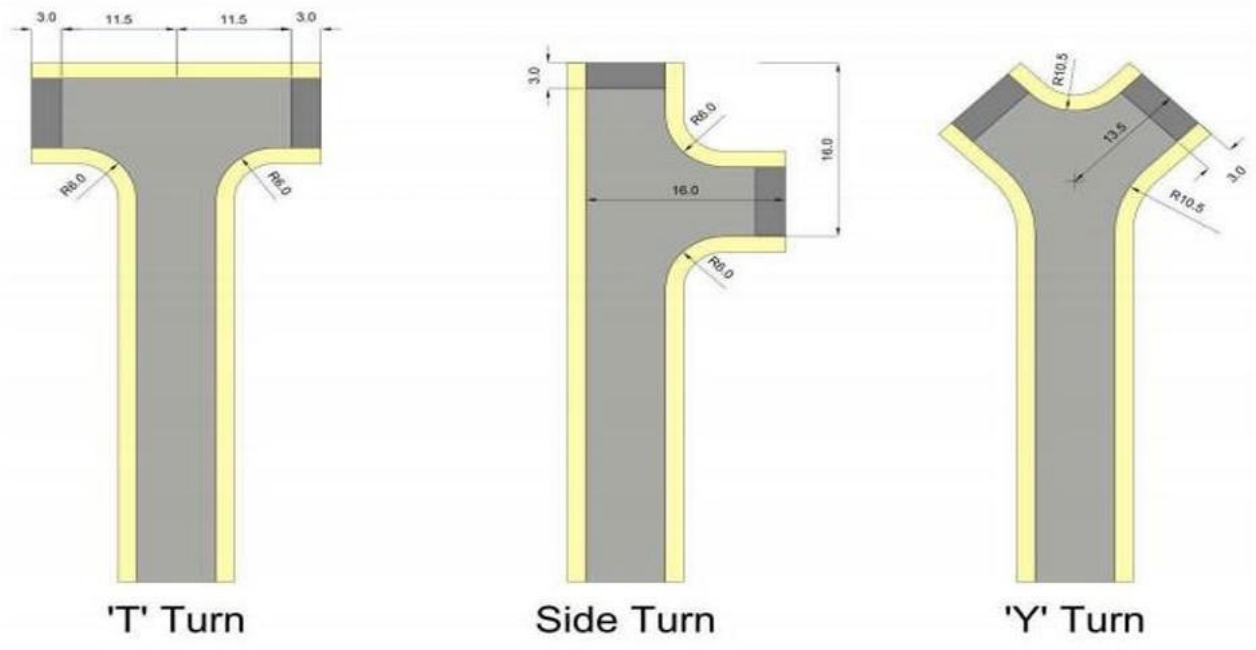
Storage systems should be provided within developments of flats and apartments and at commercial developments in accordance with the minimum requirements of this guide. Initial design of such systems should provide assessment of (amongst others; access; health and safety; security; and protection of the environment).
It is vital that adequate space and arrangements for the storage, collection of waste and recycling are considered at the earliest stage. The design must take space requirements and the on-going operational arrangements into account.
Internal storage capacity is fundamental in ensuring that residents have sufficient space to undertake segregation at the point of waste production and it is expected that developers will provide containers for use inside dwellings.

2.5 Access for waste collection vehicles

Vehicle access must be considered in relation to the design of new highways or changes to existing highways.
Wherever possible, access should avoid the need for vehicles to undertake unnecessary or difficult manoeuvres.

- Consideration must be given to vehicle movement, whether the design would force collection vehicles to stop on the public highway and if parked cars inside the development itself would prevent collections.
- Consideration should be given on how to stop cars parking inappropriately within the development site. This could include by design or by imposing parking restrictions or parking enforcement.
- Roads should have foundations and hard-wearing surfaces capable of withstanding a fully laden waste collection vehicle which weighs 32 tonnes. Please note collection authorities do not accept responsibility for any damage caused to unadopted road surfaces. It is therefore expected that any private/share roads which collection vehicles access will be designed and constructed to an adoptable standard.
- Vehicles undertaking collections should be able to stop for loading in a safe and legal position where they will not obstruct other traffic or pedestrians.
- A minimum height clearance of 4m is advised throughout the site to enable standard waste collection vehicles (heights differ for underground collection vehicles) to access the development without hindrance.
- Residents are required to present their refuse and recycling containers at the nearest kerbside in accordance with the WCA requirements, so the road should be designed so that the presentation of receptacles at the kerbside does not create a hazard. This is particularly important when a shared drive is designed, as all containers will need to be presented at the end of the shared drive, next to the public highway. (see 3.5 for further information)
- It is recommended from both an operational and safety point of view that adequate turning bays are provided to accommodate collection vehicles. The minimum approved layouts for turning bays are detailed below. Parking restrictions will need to be incorporated within the design of turning bays/areas to ensure that vehicles are able to undertake manoeuvres easily and safely.
- Vehicles manoeuvres should not be impeded by street furniture or trees.

Minimum Approved Layouts for Turning Bays
to accommodate Refuse Freighters

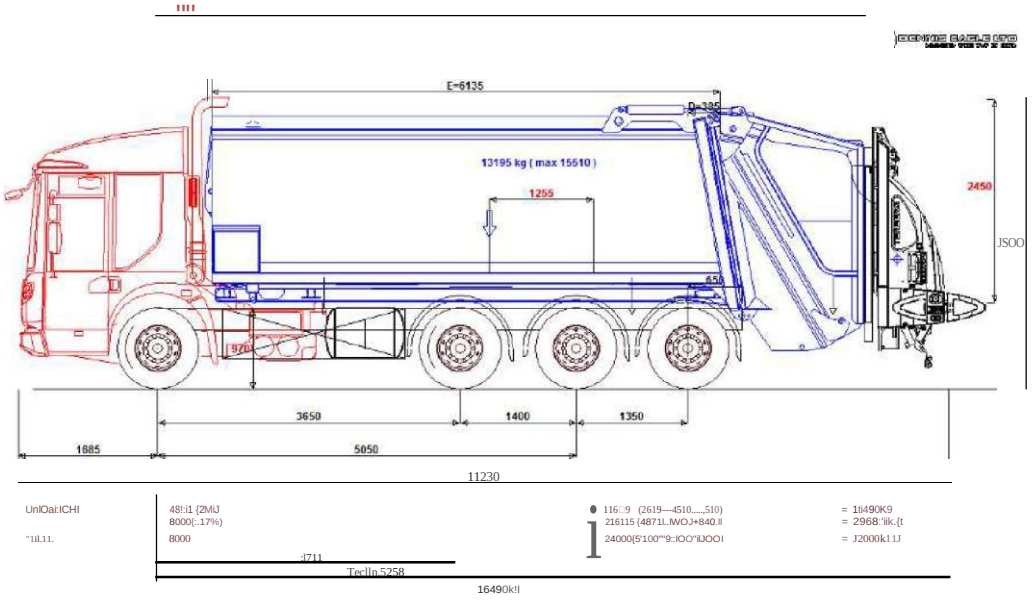


- Waste collection vehicles should not be required to reverse in normal circumstances, however where this is unavoidable reverse distances should be a maximum of 12 metres and the number of reverses limited. Any reverses should be flat and straight. Developers should design roads layouts so that waste collection vehicles do not reverse into or out of a main public highway.
- The dimensions of a 32 tonne collection vehicle (which is the maximum sized vehicle used by waste collection authorities) is detailed below.

Weight Prediction Datasheet

DENNIS EAGLE
A TERBERG ROSROCA COMPANY

Elite 6 - 8x4MS Chassis with Olympus 27W + OmniDEL Lifter



DENNIS ELITE 6 - Bx4MS (Mid Steer} Wide Track Euro6 6400 (3700+1350+1350) + DENNIS Olympus OL 27W (26.5 cum} + OmniDEL Lifter

Wheelbase	mm	5050
Front overhang	mm	1685
2-AXLED REAR BOGIE		
BOGIE WHEELBASE: bogies first axle - middle axle	mm	1400
BOGIE WHEELBASE:bogies middle axle - rear axle	mm	1350
first bogie axle	kg	5400
middle bogie axle	kg	9300
rear bogie axle	kg	9300
bogies centre of gravity backwards from bogies first axle	mm	1608

	x CoG	Fa	Ra	Total	
+ Chassis weight		4700	4200	8900	
+ number of persons 3 x 85 kg	-400	274	-19	255	
+ body weight 770 kg/m	5047	243	5817	6060	
1 SUPD	1880	39	21	60	
2 Adaptor Frame	8575	-114	294	180	
3 Terberg OmniDel Low Level Split automatic binlift	8925	-415	1010	595	
4 Binlift Pipe Up	8150	-33	93	60	
5 Minor Options	2000	37	23	60	
6 Fuel	2500	126	114	240	
7 Mudwings & Mountings	5725	-7	87	80	
weights unloaded		4851	11639	16490	
+ carrying capacity	**4003**	**3149**	**10046**	**13195**	
				(Payload limited by front axle maximum load)	
Weights loaded		8000	21685	29685	
.. Gross Vehicle Weight		8000	24000	32000	

Thepayloadisbased upona maximum refusedensityof498kg/m3,**limited by GVW.** If materialswithlowerdensities(i.e.recyclingmaterials)are collected,a lowerpayloadcan be expected.Additionallyifrefusewitha significantlygreaterdensityiscollected,the rearaxlelimit may be reached priorto GWJ, thusreducinglegalpayload.The payloadvalueissubjectto a toleranceofapproximately+/-5%.

EN1501-1 Relative Front Axle Load: RFAL Unladen= 4851 Kgs (29%) **RFAL** Laden= 8000 Kgs (27%)

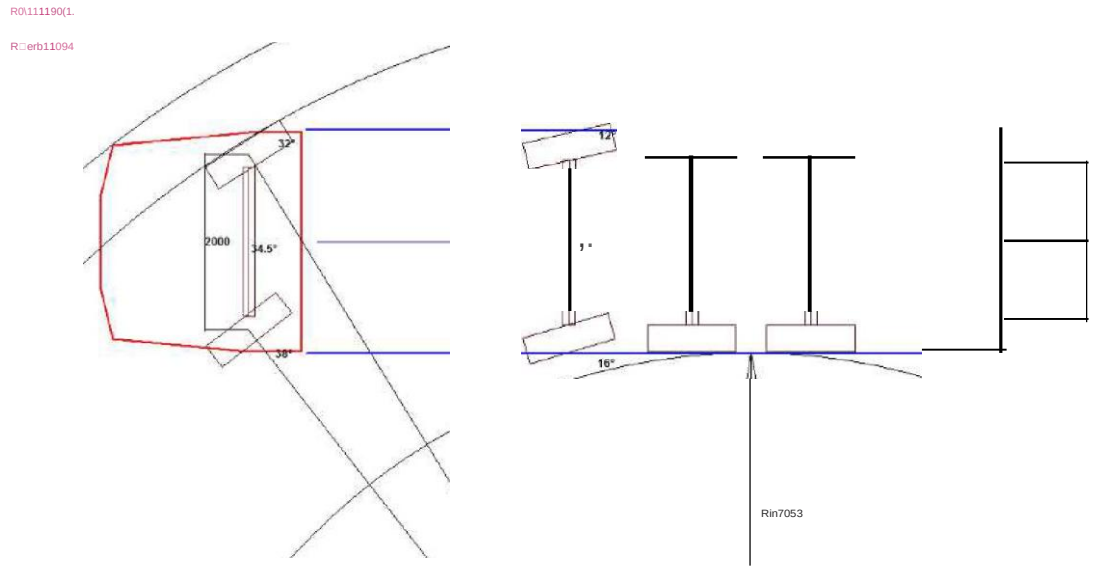
Dennis Eagle Ltd. Heathcote Industrial Estate **Warwick**

OL27W-Bx4MS-OmniDEL Page 1 CalculationModifiedDate 01/02/2017.CE

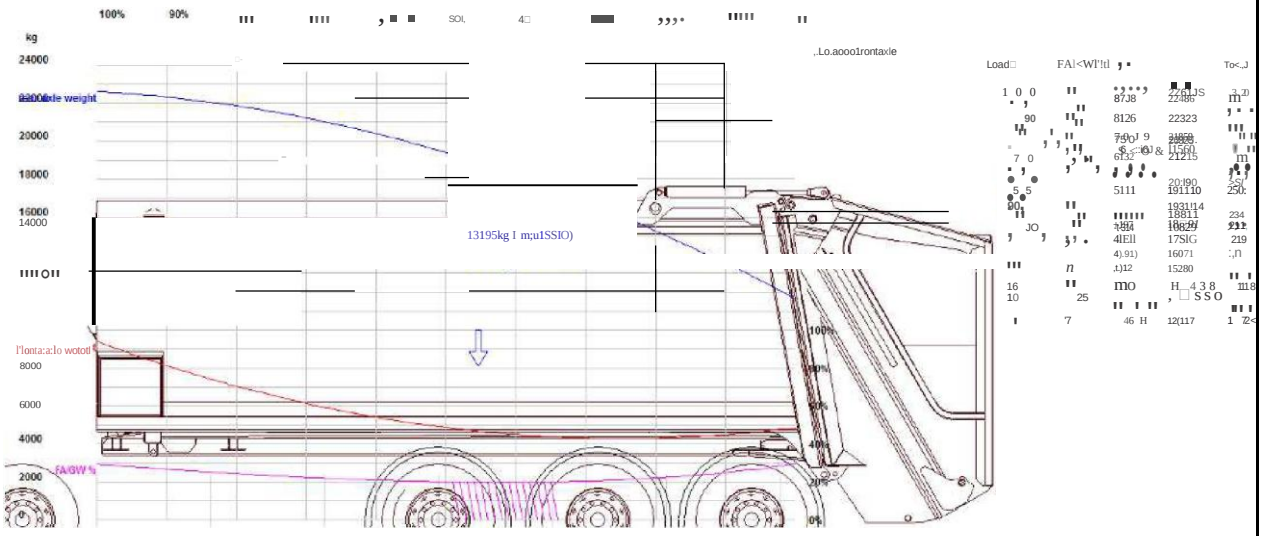
Maximum Legal Payload as configured= c. 13195 Kgs. = at a density of c. 498 Kgs/m3.

As a guide the anticipated payload al a waste density of 500 Kglm3 = 13250 Kgs.

Calculated Turning Radii (Based on front tyre size of 315/80R 22.5" 156/150 LSI)



Incremental Calculation with Front Axle Loading (Even Load Distribution)



Dennis Eagle Ltd. Heathcote Industrial Estate Warwick

OL27W-Bx4MS-OmniDEL Page 2 Calculation Modified Date 01102/2017. CE

- Waste collections will not commence until road surfaces are complete to base layer and access is reasonable and not hindered by ongoing construction work (refer to Environmental Protection Act S.45). Until these standards are met, where a development requires a waste collection service, provision will have to be made by the developer at their cost.
- WCA should be informed of any roads within sites that are due to be adopted by Highways, as this will confirm if the authority needs to undertake street cleansing operations. Alternatively, a management company would need to be appointed to undertake this function.

2.6 Household Recycling Centres

Household Recycling Centres are operational across Cambridgeshire and Peterborough. Continued development will put pressure on the existing facilities and require expansion of the network. Financial contributions will be required in accordance with Planning Obligations Circular 05/05 or as required as part of the Community Infrastructure Levy and will be secured from developers using Section 106 agreements or other legal agreements as appropriate.
Developers may be required to make land available at strategic locations.

2.7 Bring Sites

Developers may be required to provide additional space for Bring sites, upgrade existing facilities in the locality in accordance with Planning Obligations Circular 05/05, or as required as part of the Community Infrastructure Levy, pay financial contributions to the relevant Local Authority for provision or upgrade. The choice will be dependent on an assessment by the Local Authority of the need for such facilities and the impact of the development on existing infrastructure (including the preparation of a waste audit as required by Policy CS28 of the Minerals and Waste Core Strategy).

2.8 Naming Conventions

Designers and developers should ensure that any waste documentation and plans submitted for planning permission are clearly labelled with the following naming conventions so that documents can easily be located:

Waste Strategy/Tracking Design Waste Strategy/Bin Store Design

2.9 Weekly Food Waste Collections

By April 2026, all local authorities in England will be legally required to provide **weekly food waste collections for every household**, including flats and communal housing.

Over ten million tonnes of food is wasted every year in the UK, with much sent to landfill. Separate collections of food waste from every household will prevent contamination of other waste which could be usefully recycled, as well as ensuring that food waste can be sent to anaerobic digestion facilities rather than needlessly lost to landfill. Directing food waste to these plants will generate more sustainable energy to power homes and businesses, and cut down the more than 18 million tonnes of greenhouse gas emissions associated with this waste.

Further information can be found at: www.gov.uk/guidance/ensuring-good-waste-collection-services-for-households

3.0 Waste collection service for houses

3.1 Collection frequency

WCAs currently operate an alternate, fortnightly collection of refuse and recycling. In week one recycling and food waste is collected (dry mixed recycling and garden waste) and in week two non- recyclable refuse and food waste is collected.

3.2 Waste streams and bin colours

The four waste streams are collected in these bins:

- **Blue bins** – week one for dry mixed recycling (paper, cans, glass, plastic and cardboard.)
- **Green/Brown bins** – week one for compostable waste (Garden waste.)
- **Black/Green bins** – week two for refuse, and non-recyclable items.
- **WCA specified receptacle** - weekly for food waste.

3.3 External bin storage (houses)

Each house is required to have a minimum of three 240 litre wheelie bins and one 23 litre food waste caddy. However, residents can order additional bins, so it is essential that sufficient off-street space is provided for each house to store these.

Collection points should be avoided for houses and the onus should be on owners to take their bins to the kerbside for collection.

Where collection points cannot be avoided these should be discussed with the WCA to ensure they are well placed and adequate in size.

Measurements for 240 litre bins can be found in **Appendix A.**

3.4 Internal bin storage (houses)

Space is needed within the house to store a set of bins of a practical size (at least 50 litres each) that allow segregation of residual waste, and mixed dry recyclables.

In addition, a suitable location for residents to keep a 5-litre kitchen caddy is needed for the purposes of collecting food waste.

Developers should provide internal waste storage containers that are easily replaceable.

3.5 Kerbside collection

We operate a kerbside collection – meaning all bins for houses need to be presented at the kerbside of an adopted or a road designed and constructed to adoptable standards which has adequate access for the collection vehicle, any deviations from this should be agreed with the WCA.

There needs to be sufficient access to take the bins to the kerbside on collection days (ie: not taken through the house.)

Any pathways should take the most direct route possible to the kerbside and avoid the need to pull bins past parked cars or parking bays. Pathways should be of smooth, solid surface with no steps.

Where developments have shared private drives, adequate space must be provided at the edge of the shared drive, next to the highway, for all relevant containers to be presented by householders on collection day. Collection crews will not access private drives. Consideration should be given to the impact of this on the nearest property to the collection point and to ensure this does not obstruct public footpaths or roads.

4.0 Waste collection service for flats and apartments

4.1 Collection frequency

WCA's currently operate an alternate, fortnightly collection of refuse and recycling. In week one recycling and food waste is collected (dry mixed recycling and garden waste) and in week two refuse and food waste. Food waste is collected from weekly from April 2026, please check with your WCA on their intentions for food waste collection role out as this date may vary between Authorities.

4.2 Waste streams and bin colours

The four waste streams are collected in these bins:

- **Blue bins** – week one for dry mixed recycling (paper, cans, glass, plastic and cardboard.)
- **Green/Brown bins** – week one for compostable waste (Garden waste.)
- **Black/Green bins** – week two for refuse, and non-recyclable items.
- **WCA specified receptacle** – weekly for food waste.

4.3 External bin storage (flats and apartments)

Flats usually require large communal bins for all residents to share. The WCA can advise on requirements depending on the scale of each development. Bins can be stored in outdoor bin areas or indoor bin stores. Developers are responsible for liaising with WCA to order bins prior to residents moving in and check any applicable charges this will incur.

- **Bin options** - developers should contact the WCA to confirm the best mix of bins for each development.
- **Bin measurements** - measurements for all bin sizes can be found within **Appendix A.**
- **Waste capacities** – average yields for flats and apartments can be found within **Appendix B.**

4.4 Internal bin storage (flats and apartments)

Space is needed, within flats and apartments to store a set of bins of a practical size (at least 50 litres each) that allow segregation of residual waste and mixed dry recyclables.

In addition, a suitable location for residents to keep a 5 litre food waste caddy is needed. Food waste caddies are provided to residents by their WCA.

Developers should provide internal waste storage containers for mixed dry recycling and refuse that are easily replaceable.

4.5 Bin store design

The following is a summary of essential bin store design. The WCA will not be responsible for non-collections if bin store design and access is not to an acceptable standard.

- **Pull distances –** WCA reserve the right to refuse collections where pull distances for crews are greater than 10 metres from bin store to kerbside collection point.
- **Excessive pull distances** – where bin stores are more than 10 metres from kerbside collection points owners or managing agents will be required to move the bins to an agreed collection point less than 10 metres from the kerbside on the collection day.
- **Underground bin stores** - If bins are to be stored in underground car parks a managing agent will need to be employed to move the bins to a suitable collection point for the crews to empty the bins which is within 10 metres from the kerbside.
- **BS (British Standard) 5906** -states that four wheeled bin containers must be within 10 metres from where a vehicle can safely park.
- **Bulky waste** - Bin stores should not be used for the storage of resident's personal possessions and discarding of bulky waste.
- **Bin store maintenance** - The WCA is not responsible for the maintenance of any bin stores. Should they become used as a storage area for other items or lapse into a poor condition, including but not limited to discarded furniture, doors/locks broken, the Waste will not be collected, and the landowner/mangaging agent will be responsible for clearing the bin store, including costs.
- **Dropped kerbs** - and traffic management must be put in place in front of access to bin stores for the safe emptying of containers.
- **Access** - Bin store doors should be fully accessible at all times, if cars block access, bins will not be collected, and recollection charges may apply.
- **Parking** – parking bays should not be positioned outside of bin stores. Refuse crew should avoid the need to pull bins past parked cars or parking. Kick rails must be installed if bins need to pass parked cars to prevent damage.
- **Pathways** - pathways bin and vehicle collection points should take the most direct route. Paths should be a suitable width to enable the easy passage of wheeled bins. For two-wheeled bins this should be one metre, and for four-wheeled bins this should be two metres wide. Gradients should be a maximum of 1:12. Vegetation should not hinder the route. Surfaces should be uninterrupted and level with no gates, steps, gravel, soft landscaping or similar coverings.
- **Bin segregation** - domestic bins must be kept separate from bikes and commercial bins.
- **Lighting** - adequate lighting is required – preferably by automatic switches. Light switches should be protected so they cannot be damaged by bins
- **Hygiene** - adequate ventilation, drainage and a tap are required so that the store can be kept clean by residents/managing agents.

- **Door size** – bin stores require double doors to accommodate 1100 litre bins (if required) with a minimum opening of 150cm.
- **Access** - doors must fold back for ease of access. **Door hooks or floor bolts must be provided** so that doors can be held in the open position during collections. Doors must not open onto or obstruct any existing or proposed public footway or highway.
- **Bin store Keys** – contact your WCA to confirm whether bin store keys are acceptable. **Door codes** - contact your collection authority to obtain their approved list of codes (if applicable.) Failure to do so may result in non-collections. Code pads should be well lit.
- **Timed locking systems** – contact your WCA to confirm whether automatic locking systems are acceptable. Managing Agents will need to change timed locks when collections day change due to Bank holidays. There are usually a minimum of eight bank holidays per year.

- **Damage protection** - metal strips should be provided to protect doors and walls. Pipes and light switches should be protected to prevent damage caused by the movement of large bins. Protection strips need to be placed level with the height of the rim of the bin.
- **Bin store space** - there should be a minimum of 15cm clear space between and around bins. There should be sufficient space to enable each bin to be moved independently and a clear space of 150mm between the containers to allow for ease of movement. Residents and collection crews should not have to squeeze past bins to access the furthest bins. There should be sufficient overhead clearance provided to allow full opening of container lids. This should be a minimum working headroom of at least 2m (where the bin store is covered.)
- **Bin positioning** - all bins open along the width. This is therefore the front of the bin and it must be positioned with the front edge facing forward, so that the bin can be opened for residents to place waste and recycling inside.
- **Internal access to bin stores** - internal doors between accommodation and bin stores need to be accessible for the residents. Keys and codes are acceptable for ensuring the security of residents. It is not the responsibility of the collection crew to ensure that internal bin store doors are locked at the end of the collection day.
- **Fly– tipping** – The collection authority will not remove any items placed on the ground in bin stores. This is the responsibility of the managing agent. To help reduce fly-tipping bin stores must not be larger than necessary.
- **Bin store signs** –The collection authority can supply A2 signs to attach to bin store walls that explain what to put into which bin, and leaflets that provide residents with recycling information.
- **Maintenance and security** – The collection authority will not accept responsibility for damage, maintenance and security of bin stores this is the responsibility of either residents or the elected Management Company.

Illustrations of good and bad bin store design can be found in **Appendix C.**

Contact information for requesting signs, leaflets and code pads can be found in **Appendix F.**

5.0 Bulky household goods and fly-tipping

Fly-tipping can create an eye-sore and nuisance. Providing adequate waste storage should alleviate fly-tipping activities. Secluded areas and storage areas can be prime locations for fly- tipping. Dumping of bulky items by residents can interfere with the emptying of communal recycling and waste containers. Developers are advised to have sufficient space for storage of bulky items on site (away from the normal bins) where items can be safely put for collections. This should be a separate storage space accessible only to residents and large enough to store bulky items such as sofas and fridges.

6.0 Ordering bins

All bins must be ordered from the WCA a minimum of four weeks in advance of occupation to ensure they are available for delivery to the development prior to residents moving in. Delivery will be no earlier than two weeks prior to occupation.

Please contact the relevant WCA to arrange bin delivery.

The following information is required prior to occupation and delivery of bins:

- **Location** - plot and postal address (preferably an address schedule)
- **Bin type** - state If the bins are for houses or flats.
- **Delivery location** – delivery will only be made to the property address not to site compounds.
- **Contact** - a site managers phone number that we may call on the day of delivery if needed.
- **Date** - when bins are required. Please note we do not deliver communal flat bins to bin stores more than two weeks before occupation.
- **Date of occupation**- the expected occupation date - when collections need to start.
- **Site information** - development maps, occupation schedules and capacity details for flats/apartments.
- **Managing Agent information** - If bins are for flats, please advise who the managing agent will be and supply contact details.
- **Sales Office information** - please supply Sales office contact, so that leaflets can be delivered.

It is important that developers maintain communication and updates regularly with the WCA regarding occupation dates of properties and allocation of postal addresses from Royal Mail to avoid potential delays in bin deliveries and collections going live.

Contact information for ordering bins can be found in **Appendix F.**

7.0 Commencement of collection services

Arrangements must be made with the WCA to ensure bins are in place before occupation of properties. Sufficient time should be allowed for bins to be delivered, and access arrangements
e.g codes/keys agreed. Any delay to these arrangements could hinder collection commencement and may lead to additional fees for extra collections.
A clearance fee will be requested if bin stores are full because of failure to notify the WCA that collections need to commence.

Developers should contact the WCA to arrange a site visit to ensure that arrangements are
agreeable and collections can be made

Contact information for requesting a site visit can be found in **Appendix F.**

8.0 Vehicles and roads

8.1 Vehicle weights

Collection vehicles weigh up to 32 tonnes, so roads need to withstand that weight. Unadopted highways, where required, should be constructed to an adoptable weight-bearing standard. WCA do not accept any liability for damage caused by driving on unadopted roads.

Foundations and surfaces of any highway should be hardwearing and capable of withstanding the maximum anticipated fully loaded gross vehicle weight. Any covers over manholes, gully gratings and other such infrastructure should be formed from materials capable of withstanding 32 tonnes.

Vehicular access including vehicle weight, turning circles, visibility splays, width, etc., need to be taken into account in the design. Building roads to adoptable standards and submitting them for adoption will ensure they are suitable for large refuse collection vehicles and this is preferred.

Vehicle specifications can be found in **Appendix D.**

The WCA reserves the right to refuse collections that require travelling on non-adopted roads. Where this is not possible developers will be required to have designated bin collection points that are on or next to roads built to adoptable standards. Appropriate locations for collection points need to be agreed with the WCA.

8.2 Vehicle reversing

Vehicles should be able to enter and exit a site in forwards motion and any reversing manoeuvres should be kept to a minimum and **not more than 12m**.

It is important that the Highways Authority is happy with the proposed access into and out of a site onto the highway regardless of whether they adopt any new road.

8.3 Road design

All roads should be constructed to facilitate waste collections prior to occupation. This is particularly important to consider when waste collections occur from the rear of properties or from a different street than the main entrance to the properties.

- **Road width** – highways should have a minimum width of 5 metres.
- **Road standards** - roads should be constructed to an adoptable standard.
- **Vehicle clearance** - There needs to be enough clear space around the vehicle to allow efficient operation. Allow at least 4m vertical clearance, and a minimum of 3.5m width and 4m in length should be allowed where the emptying of containers takes place. Trees should not conflict with vehicles.
- **Turning heads** -where applicable must be sufficient in size to turn without reversing and have no option for vehicle parking within them as this prohibits access for refuse vehicles.
- **Bollard installations** -should be avoided where possible. Where bollards are installed, they should allow crews to enter and exit roads quickly. Any bollards that will remain standing should be spaced widely enough to allow the vehicle to pass between them unhindered.
- **Barriers** - where barriers are fitted crews should be able to access sites easily, either by pressing a button or by Automatic Number Plate Recognition systems.
- **Hammer heads** -should be avoided due to the additional time taken to manoeuvre the vehicle and the number of reverses required when using them.
- **Yellow lines** -or traffic management measures should be taken where necessary to preserve the turning capacity for the vehicles when parked cars are present.
- **Drainage ditches** – swales and drainage ditches must have hard standing built across them for access.

8.4 Vehicle tracking documents

Tracking documents must be shared with the relevant WCA as early as possible in the planning process and no later than the pre-application planning stage in order to fully assess proposed plans.

Tracking documents should include:

- **Full plans** - showing the vehicles journey throughout the development for a 32 tonne refuse vehicle**,** including where it enters and leaves (**Appendix D**: Vehicle information).
- **Crew pulling distances** - measurements of drag distances for all bins.
- **Vehicle reverses** – where reverses are planned, distance measurements.
- **Collection points** - that show the residents route and distance when taking bins to the kerbside from their property.
- **Bin store locations** – and vehicle access.
- **On street car parking** – spaces and bays.
- **Street furniture** - e.g Trees and lamp posts etc.
- **Road dimensions** – lengths and widths

9.0 Underground bins

9.1 Background

9.1.1 What are underground bins?

Underground bins enable a large volume of waste to be stored in a single container, whilst keeping it out of sight below ground. The system originates from Continental Europe, where the prevalence of flats instead of houses means that communal bin systems are popular.

The basic system comprises of a concrete bunker set in the ground, a bin-liner or container which holds the waste and is located in the bunker, and a surface entry point or input receptacle (which often looks like a conventional street waste bin) mounted on a section of paving or platform. All that is visible at street level is the input receptacle, and the dedicated paving section or platform which covers the main underground container. Please contact your WCA to discuss whether underground bin waste options are available within your area.

9.1.2 Approach to underground bins

WCAs actively welcome proposals from developers for alternative waste management solutions. Underground storage of waste or alternative methods of waste collection may be more appropriate for a development than conventional/traditional methods of storage and collection.

Alternative waste management solutions must be discussed with WCAs at the design stage, be well researched, demonstrate realistic and workable solutions and be clearly presented.

Developers are advised to speak to suppliers when establishing the best solution and costs for underground systems since these will vary depending on the environment in which bins are to be placed.

9.2 Underground bins and housing types

Underground bin systems are generally more suited to higher density areas. If the area is too low in density, then bins may produce insufficient waste volumes to provide acceptable walking distances to individual residences, resulting in inefficient collections. Alternatively, if the collection volume is large enough to provide efficiency of collection, the walking distances may still be unacceptably far.

WCAs request that developers of high-density housing consider installing underground bin systems as their first option before looking towards conventional wheelie bin systems. Experience has shown that underground bins are efficient and cost effective for both developers and collection authorities and are therefore the preferred system for high density housing.

Where there is mixed density, an underground system may still be the best option and can be used by all types of properties. Bin location is key to a successful underground collection; therefore, it is essential that developers contact the WCA as early in the planning stages as possible to discuss and agree plans.

Density	Typologies	Underground bin rationale
'High' density	Flats and Apartments	Communal collection is the norm for flats. Underground bins will be similar in operation for residents whilst removing unsightly large bin stores. Underground systems provide the most efficient and cost effective model of collecting waste for this type of property, are low maintenance and improve streetscapes
'Medium' density	Terraced houses- no flats	Residents walking distances and the low level of waste generated will mean that underground systems are not an efficient collection method for this type of property
'Low' density	Semi-detached and detached houses - no flats	Residents walking distances and the low level of waste generated will mean that underground systems are not an efficient collection method for this type of property
'Mixed' density	Significant flats alongside streets of houses	Where properties are mixed (flats and houses) there is an opportunity to avoid the use of wheeled bins and use underground systems. The design of the site and accessibility is important for a successful underground collection system

Fig 1: Summary of suitability of underground collections for different housing types

9.3 Types of underground bins

Underground bins use either hook-lift systems or hydraulic platforms to raise them from the ground and empty the waste. The type of system used influences the types of collection vehicle and the number of containers needed underground.

The hook-lift system houses bigger containers and requires a crane-lift vehicle to empty the bins. Hook -lift systems are used for collecting general waste and recycling. They are not appropriate for collecting garden waste or bring bank materials such as textiles.

Hydraulic-lift systems use standard wheeled bins that can be emptied by a traditional vehicle. Hydraulic-lift systems are used for collecting garden and food waste and bring bank materials such as small electrical appliances (WEEE) and textiles.

WCAs have experience of operating both systems and are keen to expand these where possible. Underground systems work better in high density developments where walk distances are kept to a minimum and developers are able to save by replacing standard bin stores with underground systems.

Examples of different underground bin systems can be found in **Appendix E.**

9.4 The benefits of installing underground bins

Experience has shown that developers, residents and Collection Authorities all benefit from the installation of underground bins:

- **Developer savings** – space is not required for wheeled bins or bin stores resulting in greater build space and cost savings. (one underground bin replaces around 20 wheeled bins.)

- **Carbon reduction** - removing traditional stop-start collections reduces carbon emissions and the number of vehicle visits to site can be reduced once fill monitoring systems are fitted.
- **Recycling rates**- recycling rates have been found to be higher in underground developments than in standard developments.
- **Residents feedback** -states that the main benefits of the scheme are the improved visual impact of the bins and not having to store or drag bins out for collection.
- **Collection policies** – no reliance on residents' co-operation regarding which bin to present, or forgetting to place out their bin on time.
- **Improved streetscape** – the waste collection system is embraced, not tucked away but integrated.
- **Quality of recycling** - is good as contamination with the wrong waste is rare.
- **Flexible collections** - for residents and the council, as waste is deposited/collected when needed.
- **Missed bins** - no calls about collection problems and the council doesn't have to return to site for any missed bins. Less vehicle movements
- **Fly-tipping** - less fly-tipping to collect. No hidden bin stores or compounds creating waste accumulation.
- **Damaged bins** - no operational or financial burden for regular replacement of missing or broken bins.
- **Improved Health and safety for crews** - less manual handling of containers, resulting in reduced Musco skeletal injuies from dragging heavy bins.
- **Reduced staffing** – one operative replaces a crew of three.
- **Positive media coverage** – underground bins attract positive media coverage in the local and national press.

9.5 Underground bin collection vehicles

- **Hydraulic platforms** - usually house 1100 litre bins and these are collected using standard collection vehicles.
- **Hook lift bins** -are collected using a specialist Hi-ab vehicle.

It is **essential** that **developers consult with the waste collection authority (WCA)** prior to installing underground bins so that we can ensure compatibility with underground collection vehicles.

Underground vehicle specifications can be found within **Appendix D.**

9.6 Developer considerations when designing underground bin schemes

Experience of running underground bin schemes has shown that there are a number of factors to consider at the planning stage of the development:

- **Fill monitoring** – systems should be installed to maximise productivity and minimise unnecessary journeys and carbon emissions.
- **Cleaning** – as with flats and apartments, Managing Agents need to be employed to keep areas surrounding bins and bin gulleys clear.
- **Maintenance** – costs need to be agreed and factored into S106 agreements.
- **Street furniture and parking**– hinders collections, trees, lamposts and parking spaces should be positioned away from bins, a minimum 2 metre clear distance should be maintained.
- **Site layout** – developments with hook-lift systems should allow for a one-man operation and therefore reverse manoeuvres should be avoided.
- **Cardboard** – alternative arrangements need to be considered for collecting large cardboard during occupation phases, as these materials can cause blockages within the receptacles.
- **Type of development/type of collection** – some sites are better suited to hydraulic bins due to location and existing street furniture. This should be discussed with WCAs and bin suppliers at the design stage.
- **Food and Garden waste management** – Hydraulic systems are better suited to this type of waste due to it's heavy and wet nature.
- **Road surfaces** - no cobbles and uneven road surfaces – lorry feet need a flat surface and the weight of the vehicle may destroy cobbles.
- **Layby size** – there should be sufficient room to pick up bins e.g. wide enough road or layby, however it is better to put in half width laybys or a wider road so that cars do not have space to park beside bins and hinder collections.
- **Additional big vehicles** – roads need to be wide enough to accommodate other large vehicles passing the refuse vehicle - eg Buses.
- **Parking enforcement** - laybys require parking signage/enforcement – parked cars hinder collections.
- **Bin positioning** – need to be close to roadside – not set back – crane reach is limited.
- **Bunker opening directions** – bunkers should not open onto street furniture, footpaths or parking spaces.
- **Receptacle opening directions –** hook-lift systems require consideration because hinges will get damaged if lids open the wrong way. Receptacles should be hinged on the opposite side to platforms to avoid damage to hinges.
- **Road Bollards** – need to be sunken and easy to operate eg remote control.
- **Walking distances** -ideally residents should not walk further than 30 metres to place waste in bins. Anything over 30 metres should be exeptional and discussed with WCAs.
- **Platform positioning** – Platform edges need to be at least 2m from the nearest building to ensure bins don't hit buildings when lifted.

- **Platform positioning** – Consideration should be given to what is above and beside platforms. Tree canopies, outward opening windows and hedging should be avoided. Receptacles should not open onto roads or car parking spaces.
- **Assisted collections** – ideally those who require help with depositing waste will have access to support to do so through managing Agents or friends and neighbours.
- **Commissioning bins** – Prior to occupation developers must contact WCAs to arrange for bins to be tested and commissioned. A minimum of one months notice is required to ensure WCAs can attend site on foot and ensure bins are accessible before vehicles are taken to site. WCAs cannot test bins when roads are incomplete, and the vehicle is required to reverse. In these circumstances temporary overground bins will be required.

If you require further information about underground bin schemes, please contact your relevant WCA.

10.0 Bring Sites

10.1 Introduction

Bring Sites are places where members of the public can bring their waste and separate it into large containers (e.g. Textile and small electrical appliance banks.) They are generally located within publicly accessible areas such as a supermarket or public car parks and typically comprise a number of containers allowing separate collection of materials for recycling. They are serviced by or on behalf of individual Waste Collection Authorities.

10.2 Provision of Bring sites

Developers may be required to provide funding towards adequate temporary and permanent bring site facilities to serve new residential developments.

Developers should assess the impact of their proposals on existing Bring Site facilities and in particular whether the development creates or increases the need for such facilities in the

local area. This should be done by seeking advice from the WCA relating to the current capacity of existing Bring Sites.

The requirement for Bring sites is calculated on a per dwelling basis. One bring site may be required once developments reach 800 dwellings, depending on their location and proximity to other Bring sites or Household Recycling Centres. Please contact the relevant WCA to assess individual requirements for your development.

The WCAs request that developers provide one area of hardstanding in public realm areas for each 800 dwellings, where approximately four large recycling banks can be placed. Hardstanding areas should be in areas that are easy for residents to deposit items and off-takers to collect them. There should not be any barriers or gates that impede entry to the site. It is helpful for developers to provide access to electricity as this allows flexibility at the site in terms of maintenance and types of banks.

The WCA will source the banks and manage them once they are in position.

10.3 Bring bank dimensions and site space

Developers should ensure that hardstanding areas provided for Bring Banks are sufficient in size to accommodate four large banks.

Bring banks differ in size depending on what they collect and who supplies them, but average small and large bank dimensions are as follows:

Size of bank	Height (mm)	Width (mm)	Depth (mm)
Small (typically collects shoes only, batteries of bulbs)	1500	1300	1300
Large bank (Typically collects multiple recycling items or textiles and shoes together)	1900	1500	1200

Fig 2 Bring bank dimensions

10.4 Cardboard

Due to the amount of large cardboard generated on new developments cardboard skips should be provided during occupation phases. Developers should approach WCA for further information on what to provide as this will vary from site to site.

11.0 Household Recycling Centres

11.1 Introduction

Household Recycling Centres (HRCs) are positioned in strategic locations and enable the public to bring and deposit bulky household wastes and other types of household waste that would not normally be taken as part of the normal collection round. Sites encourage the segregation of waste for recycling and reuse.

11.2 Provision of Household Recycling Centres

New residential developments increase the demand on Household Recycling Centres, and developers may be asked to make Section 106 contributions to support service provision.

Household Recycling Centres are managed by Cambridgeshire County Council and Peterborough City Council. Further information can be found by visiting the websites below:

www.cambridgeshire.gov.uk/hrc

www.peterborough.gov.uk/bins-waste-and-recycling/

12.0 Commercial premises

12.1 Background

All non-residential properties require scheduled waste collections from a waste contractor. This is not included in business rates.

It is enforceable by multiple agencies including the Local Authority under Section 34 of the Environmental Protection Act 1990 & Clean Neigbourhoods and Environment Act 2005.

Collection providers - the facilities management / owner / store manager etc can choose to use either the local WCA or a private company.

- **Waste streams** - to satisfy DEFRA's national pre-treatment regulations a minimum of three streams of waste collection (general waste / dry recycling / food) are required for non- residential / commercial developments.
- **Change of use** - where an existing site is being changed from one business (non-residential) to another it is important to consider the impact that will make on waste storage and collection.
- **Waste levels** - a block previously used as office space will have very different waste requirements to a fast-food restaurant, and a clothes shop will produce far more cardboard requiring frequent collections than a bank.
- **Capacities -** the location, style, type and size of the building/s will determine the size of the waste storage space (bin store).
- **Building layouts** – The layout of interior/ external/ ground floor/ subterranean bin stores need to be placed next to or near the commercial/ retail/ restaurant unit that requires them – the further away they are the greater the risk of waste (bags/ broken furniture/ cardboard/ pallets etc.) being deposited in corridors/ corners and other unsafe areas. **Storage levels** - the space for waste storage should be sufficient to store a minimum of two days of waste generated by the business/es as well as the containers provided by the chosen contractor.
- **Collection frequency** - the frequency of collections should be agreed with your nominated waste collection provider.
- **Compactors** – the use of compactors should be agreed with your waste collection provider.

12.2 Commercial bin store Design

Detailed drawings of proposed bin stores should be included with the application, complete with all measurements.

Developers should **refer** to **section 4.5** when designing commercial bin stores, but should also note the additional requirements below:

- **Collection times**- Collections may occur anytime in the 24hr clock (by any contactor) so bin stores should be accessible. If crews cannot access bin stores at any time all containers/ bins/ sacks will need to be presented on the street at close of business for the following morning.
- **Key codes/locks -**If the store is accessible directly from the street it needs to be secured by key-code locks rather than physical keys. This provides greater security at a lower long-term cost. Waste collectors must be updated when new codes are installed rather than having to replace & send keys.
- **Internal security -** Users of the site should be able to enter the bin store through internal door/s. This improves security and reduces risks associated with only external access.
- **Bulky item storage** - consideration of bulky item storage should be given, it is not uncommon for larger office/ retail blocks to require occasional storage for items such as:
    - Pallets
    - broken desks/ chairs
    - drums of waste oil from food preparation
    - electrical equipment
- Bulky items **cannot be disposed of in regular bins.** Alternative arrangements need to be made with contractors to dispose of it. Waste storage areas should comply with the following standard requirements:

1. Bin stores should be street accessible, open onto the public highway or wide access road, with no slopes, gravel or steps.
2. Doors should open back along the wall at 180', be provided with door hooks or doors that remain in the open position while collection takes place to prevent damage or injury. Interior walls/doors should have metal strips to prevent damage from bins.
3. Bin stores should be provided with key-code locks rather than keys.
4. There should be no more than one door or gate between vehicle and bin store. A separate door can be provided for access by users of the building to access bins.
5. Automatic lighting should be installed to operate with door opening and closing.
6. Bin stores should have washdown facilities (a cage protected or recessed tap) and drainage central to the store for occasional maintenance and cleansing.
7. Consideration of bulky item storage should be given, it is not uncommon for sites to require occasional storage for items such as: pallets, broken furniture and electrical equipment whilst safe and legal disposal arrangements are made. These cannot be disposed of in regular scheduled bin collections and the management company will need to make arrangements with contractors to dispose of these items.

Appendix A: Bin types and sizes

Sizes are the same for black, blue, green and brown bins. Illustrations are for sizing purposes and do not necessarily represent the correct colours used.

Container type	Image	Dimensions
140 Litre bin (used for commercial food waste, and food waste at flats)		H = 106.7 cm W = 48.3 cm D =55.9 cm
240 Litre bin (standard bins for houses) *(used for Garden waste at flats if required)*		H = 106.7 cm W = 58 cm D = 74 cm
360 Litre bin (used at flats where large bins will not fit, or for residents unable to use larger bins) *(used for Garden waste at flats if required)*		H = 111.8 cm W = 58.4 cm D = 86.4 cm

660 Litre bin (used at flats, suitable where 1100 litre bins will not fit, or for residents unable to use larger bins) *(not suitable for garden waste due to weight)*		H = 121.9 cm W = 137.2 D = 78 cm
1100 Litre bin (standard bins for flats) *(not suitable for garden waste due to weight)*		H = 135.4 cm W = 121 cm D = 107.3 cm
23 litre food waste caddy (standard caddys for houses)		H = 40.5 cm W = 32 cm D = 40 cm
5 litre food waste kitchen caddy (indoor caddy for houses and flats)		H = 20 cm W = 25 cm D = 19 cm

Fig 3 Bin types and sizes

Appendix B: Waste volumes for flats and apartments

Property type	Refuse	Mixed recycling	Garden waste (Flats with own garden or communal gardens)	Food waste (140 litre bin)
1 bed flat	110	110	20	7 litres per flat or 1 x 140 bin per 20 flats
2 bed flat	165	165	20	7 litres per flat or 1 x 140 bin per 20 flats
3 bed flat	200	200	20	7 litres per flat or 1 x 140 bin per 20 flats
4 bed flat	250	250	20	7 litres per flat or 1 x 140 bin per 20 flats

Fig 4 Expected waste volumes for flats and apartments shown in litres (per flat)

Food and Garden waste capacities:

140 litre bins are used for food waste; 240 or 360 litre bins are used for garden waste (due to weight of organic matter we don't use 660 or 1100 litre bins).

Where flats do not have gardens, they do not require a garden waste bin.

The general rule is that every 20 flats will share a 140 food waste bin. So if there are 60 flats, they would need 3 x 140 litre food waste bins for example.

Please note:
Where underground bins are to be used, the food waste bins should be sited in a metal housing – see Appendix C, or one of the underground bins would be dedicated to food waste – please contact your WCA for advice.

Waste requirements for flats are based on the following assumptions:

- there will be a maximum of **two** people living in a one-bedroom flat
- there will be a maximum of **three** people living in a two-bedroom flat
- there will be a maximum of **four** people living in a three-bedroom flat
- there will be a maximum of **five** people living in a four-bedroom flat

Example:

A block of 14 flats consisting of 10 x 1 bed and 4 x 2 bed flats would be calculated as follows:

- 10 x 110 litres = 1100
- 4 x 165 litres = 660

Total of 1,760 divided by bin size of either 1100 litre (or another bin size), rounding up, so this would be 1.6 bins, round up to **2 x 1100 for refuse** and **2 x 1100 for recycling**.

For food waste, 20 flats would share **1 x 140 food** bin.
If there are no gardens they would not need a garden waste bin. If there are communal gardens the calculation would be 14 flats x 20 litres = 280 litres, which equates to a **1 x 360 litre garden** bin.

Appendix C: Bin store illustrations

Fig 1 Double doors – do not stay open and will swing shut fast, hindering collections

Fig 2 Double doors – stay open while collection takes place, with door bolts, hooks or automatic opening systems

Fig 3 No drop kerb and pavement too narrow for 1100 litre bins

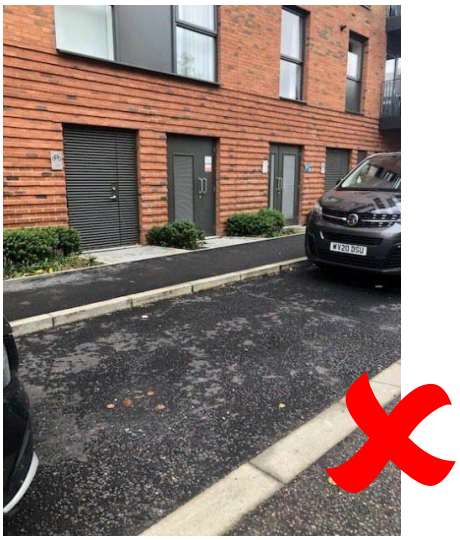


Fig 4 No drop kerb – parking bay will restrict access

Fig 5 Drop kerb directly outside bin store

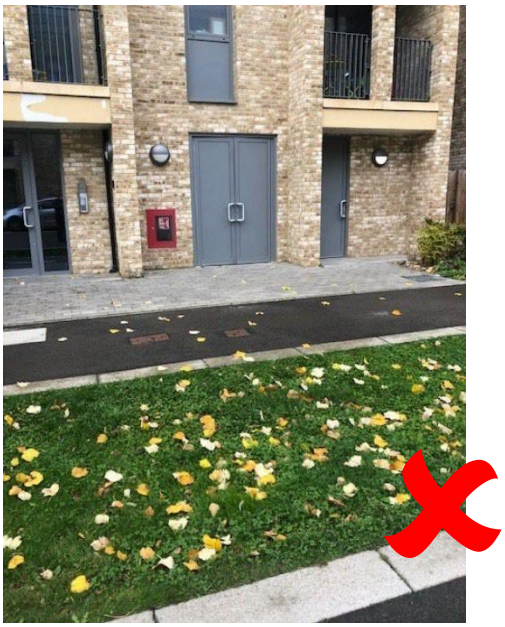


Fig 10 Swales mean there is no smooth access from bin store and bins have to be dragged across grass

Fig 11 Swales are slabbed to allow 1100 litre bins to be easily moved to roadside for collection

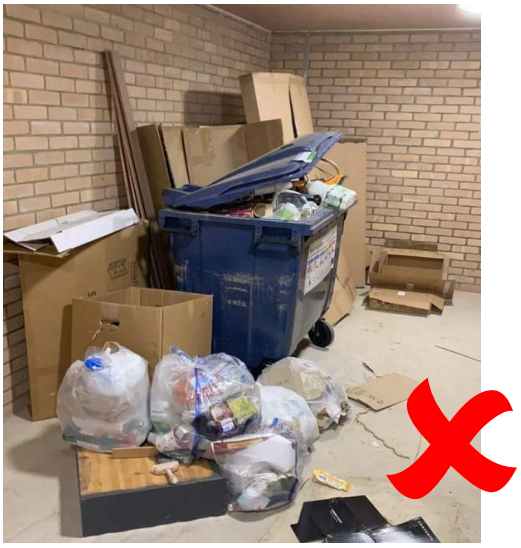


Fig 12 Bad bin store design – too much space in store allowing fly-tipping of cardboard

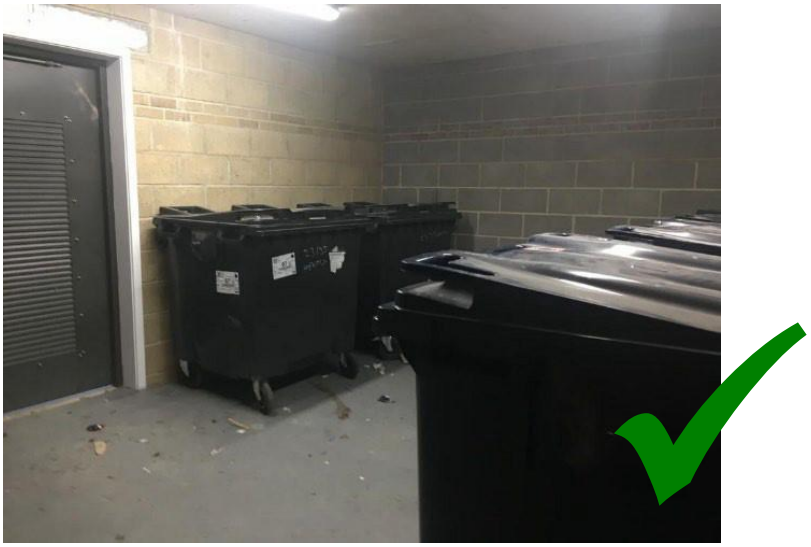


Fig 13 Good bin store design – bins fit in the bin store without too much excess space

Fig 14 Alternative bin store designs – suitable for smaller blocks of apartments

Fig 15 Food waste housing options – a 140 litre bin sits inside. Options for top lid opening or foot pedal to open. All should be locked with a square metal key.

Appendix D: Vehicle information

Please use the vehicle specifications below for tracking purposes when planning and designing new developments. Check measurements, because they differ from the other docs

Vehicle make	Vehicle type	Gross vehicle weight	Height	Width	Length	Turning circle
Dennis Eagle	RCV	32000	3,600mm (with hazard beacons)	2,500mm (without mirrors) 3,000mm (with mirrors)	12,000mm (from front to rear of bin lift)	23.88 metres wall to wall
Dennis Eagle	Underground	32000	3,830mm	2,500mm (without mirrors) 3,000mm (with mirrors)	12,000mm (from front to rear of bin lift)	23.88m metres wall to wall

Fig 15 GCSWS vehicle information

Appendix E: Underground bin system types, (hydraulic and hook-lift)

Hydraulic bins can be used for both domestic collections and to collect items of recycling at bring bank sites. Typically an 1100 litre bin is housed within the platform and can be wheeled out and emptied using standard collection vehicles.

Fig 16 Single Hydraulic bring banks

Fig 17 Double Hydraulic bring banks collecting mixed recycling collecting small electrical appliances

Hook-lift underground systems are typically used for domestic collections of recycling and general waste.

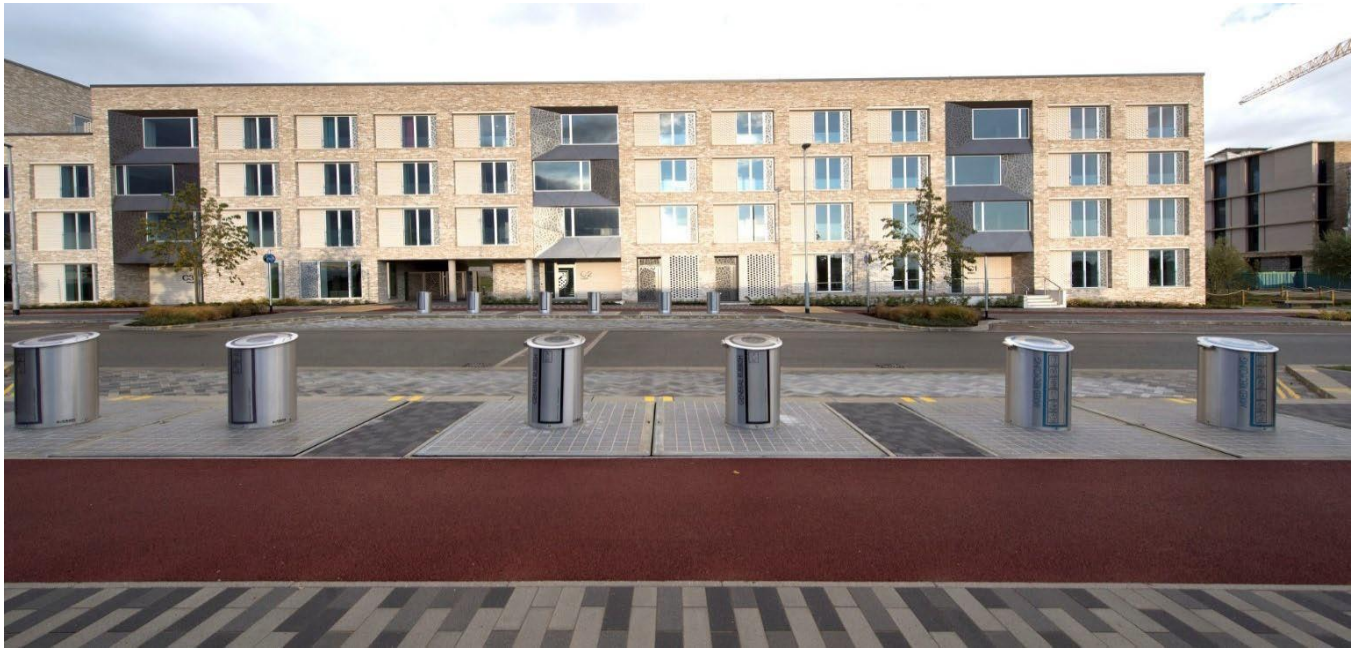


Fig 18 Underground bins hook-lift system streetscape

Fig 19 Underground bins hook-lift system in the ground

Fig 20 Underground bin hook-lift system out of the ground showing 5m3 container

Underground systems typical dimensions are as follows:

Unit Capacity	Typical Dimensions (mm)
3m3 Capacity	Below Ground Component 1430l x 1430w x 1604h Above Ground Component 900l x 620w x 890h Ground Area Required 1720mm2
4m3 Capacity	Below Ground Component 1430l x 1430w x 2139h Above Ground Component 900l x 620w x 890h Ground Area Required 1720mm2
5m3 Capacity	Below Ground Component 1430l x 1430w x 2674h Above Ground Component 900l x 620w x 890h Ground Area Required 1780mm2

Fig 21 Underground bin dimensions

Appendix F: GCSWS Contact information

Greater Cambridgeshire Shared Waste Services (South Cambs & Cambridge City) wasteplanning@scambs.gov.uk

East Cambridgeshire District Council waste@eastcambs.gov.uk

Fenland District Council planning@fenland.gov.uk

Huntingdonshire District Council DMadmin@huntingdonshire.gov.uk

Appendix G: Developers Minimum Standards Checklist

This checklist should be used by developers as a tool to satisfy WCA that developments will meet the minimum standards needed for waste to be collected once built.

1. Minimum standards Checklist – Developers will be expected to demonstrate that their proposals satisfy the **minimum requirements** set out in the guidance document by assessing them against the questions in the 'Minimum Standards Checklist' below. They should ensure they have read the guidance in full and are aware of all **minimum requirements** the guidance places upon them before completing the checklist.
Where distances are referred to within the guidance it is worth noting that **any maximum distances stated should be the exception not the norm.**

2. Basis for Conditions and Agreements – This checklist will be used by WCAs as the basis for initial discussions that may relate to planning conditions being imposed where they are deemed necessary and the 6 tests satisfied.

Minimum Standards Checklist Instructions Usage

The checklist should be completed by the developer and submitted to the Planning Department with all supporting plans and/or documents. It applies to all residential and commercial developments.

Standards met - when completing the checklist a '**yes'** should be placed in the adjacent box to signify that the standard has been considered at the stage of initial design proposals and will be met once developments plans are finalised.

Standards not met - where a standard will not be met, the developer should place a **'No'** in the adjacent box and must explain briefly why it will not be met in the notes section of the checklist. Developers should then fully justify why the standard will not be met as part of the Design and Access Statement which will be submitted with the planning application.

Standards not applicable - where a standard is not applicable, the developer should place a **N/A** in the adjacent box and add a brief explanation about why the standard will not be met in the notes section of the checklist. Developers should then fully justify why the standard is not applicable as part of the Design and Access Statement which will be submitted with the planning application.

Completed minimum standards checklists should be emailed to WCA with the developments name in the heading.

Glossary

Above-ground storage compounds – A waste storage compound is a structure which houses the appropriate containers for the storage of waste associated with development.

Additional storage areas – This is the additional space required for the storage of bulky waste items which is normally located close to the external waste storage compound within residential developments. Please see part 11 of the Guide and the section entitled “Waste Management Provision for Flats and Apartments” for further details.

Alternate weekly (collection) – Alternate weekly collection involves the collection of household wastes every other week, during the intervening weeks recyclables and/or green wastes will be collected.

Assessment Criteria – To be completed by developers and submitted as part of planning applications it sets out the information required in relation to any development which involves the construction of a waste storage compound, Bring site or an alternative scheme to that suggested in the Design Guide.

Basis for conditions and agreements – sets out the scope and process relating to planning obligations to provide expanded and/or new Bring sites and Household Recycling Centres as part of residential developments.

Biodegradable waste – waste which is able to decompose through the action of bacteria or other microbes. This includes material such as paper, food waste and green garden waste. Waste which is under the control of local authorities is referred to as biodegradable municipal waste.

Bring Site – These sites comprise a number of containers to allow for the collection of materials for recycling and which are generally located in publiclly accessible areas such as a supermarket or public car park. Please see part 9 of the Guide for further detail.

Bulky waste – is a term used to describe waste types that are too large to be accepted by the regular waste collection service. Bulky waste items can include discarded furniture, large appliances and white goods.

Cambridgeshire Design Guide for Streets and Public Realm – The Design Guide which is County Council policy sets out the key principles and asprirations that should underpin the detailed discussions about the design of streets and public spaces. Please see Part 2 of the Guide for further details.

Collection frequency – This is the frequency of waste collection from residents in Cambridgeshire and Peterborough. Further details relating to current collection frequencies are available from the Cambridgeshire and Peterborough Waste Collection Authorities.

Community Group – Voluntary group operating at a local level.

Community Infrastructure Levy – The Community Infrastructure Levy (CIL) will be a new charge which local authorities in England and Wales will be empowered, but not required, to levy on most types of new development in their areas. CIL charges will be based on simple formulae which relate the size of the charge to the size and character of the development paying it. The Levy is intended to partially replace the existing system of negotiating Section 106 Agreements with developers.

Community Recycling – this is recycling which is led by a community group or a local community.

Community Trust – Independent non-profit trusts which own or control land and facilities in perpetuity for the benefit of the community.

Compactor – This is a machine or mechanism used to reduce the volume of waste material through compaction, storage and transportation.

Composters/composting bins – these are containers which are designed to enable residents and community groups to compost their organic waste. Please see Appendix C of the Guide for further details.

Condition (planning) – Planning conditions are applied to the grant of planning permission and limit and control the way in which the planning permission may be implemented.

Design Standards Checklist – Applies to all commercial and residential developments including redevelopment of existing sites it sets out the minimum standards required in relation to waste storage, highway design, highway design, planning obligations and alternative waste schemes.

Development Plan Documents (DPDs) – spatial planning documents prepared by the relevant planning authority and subject to an independent examination by a Planning Inspector appointed by the Secretary of State.

Dry Recyclable – Dry Recyclable waste including materials such as paper, cardboard, food tins, drink cans (aluminium) and plastic bottles.

Education Schemes – These are schemes which are used to promote waste reduction and recycling amongst residents including those promoted by the RECAP Partnership. Please see Appendix C of the Guide for further details.

Environmental Protection Act (1990) – This act sets out the duties of Waste Collection and Waste Disposal authorities in relation to the collection, disposal and recycling of controlled waste and the regulation of such activities. recap.co.uk

External storage capacity – This is the amount of space required for external storage containers to serve residential and commercial developments. Please see part 4 of the Guide for further details in relation to the recommended capacities for different types of development.

Food waste – includes kitchen food, raw or cooked, which is discarded.

Green waste – is household waste which is unwanted vegetation such as grass cuttings, tree cuttings, leaves which arise from gardens.

Hazardous Waste Regulations 2005 – Regulations which provide a documented cradle-to-grave procedure for the safe movement, treatment and disposal of hazardous waste.

Household Recycling Centre (formerly known as Household Waste Recycling Centre) – a place provided by the Waste Disposal Authority where members of the public can deliver household wastes for disposal.

Recycling facilities may also be provided at these sites. (Also known as Civic Amenity Sites). Please see part 8 of the Guide for further details.

Internal storage capacity – This is the amount of space required within dwellings to enable the segregation and where possible the composting of waste. Please see part 4 of the Guide for further details.

Landfill – the deposit of waste onto and into land in such a way that pollution or harm to the environment is prevented and, through restoration, to provide land which may be used for another purpose.

Landfill Allowance Trading Scheme (LATS) – This is an initiative by the UK government, which identify the amount of biodegradable municipal waste (BMW) which can be sent to landfill. Local authorities are then allowed to trade, bank or borrow this allowance with other authorities.

Landfill Directive – This a European Directive the overall aim of which is to prevent or reduce as far as possible negative effects on the environment arising from the landfilling of waste, during the whole life-cycle of the landfill.

Local Planning Authority – This is the local authority responsible for the preparation of a Development Plan relating to all matters (excluding minerals and waste) and the determination of related planning applications e.g. housing development. Both the Cambridgeshire Districts and Peterborough City Council are Local Planning Authorities.

Manual for Streets – The Department of Transport Manual for Streets was launched in March 2007 and supercedes Design Bulletin 32 and Places, Streets and Movement, which are now withdrawn. The manual which is national guidance should be used for the design, construction, adoption and maintenance of new residential streets, but it is also applicable to existing residential streets subject to re-design.

Mixed Dry Recyclables – this is where different types of dry recyclable e.g. glass, plastic and cans are collected together by the relevant Waste Collection Authority.

Municipal waste – Waste from households which is under the control of local authorities is referred to as municipal waste.

On-site Treatment – Is recycling on site where the waste is generated and involves the physical, chemical or biological processing of wastes to reduce their volume or harmfulness.

Peterborough Residential Design Guide – This document which is Peterborough City Council approved guidance sets out design guidelines for all those involved in housing development in the Peterborough area. Please see part 2 of the Guide for further details.

Planning obligations – please see Section 106 agreements. Planning Obligations Circular 05/05 – a Planning Circular which sets out guidance to English local authorities on the use of planning obligations under Section 106 of the Town and Country Planning Act (as amended by subsequent Acts).

Planning Policy Statement (PPS) – Documents issued by Government to replace the existing Planning Policy Guidance notes in order to provide greater clarity and to remove from national policy advice on practical implementation, which is better expressed as guidance rather than policy.

RECAP Partnership – The Cambridgeshire and Peterborough Authorities together have responsibility for the collection and disposal of municipal waste. The Cambridgeshire and Peterborough Waste Partnership (RECAP) was established to oversee waste management as a whole.

RECAP Waste Management Design Toolkit – Developers are required to complete the relevant parts of the toolkit in accordance with the Cambridgeshire and Peterborough Minerals and Waste Core Strategy and submit this information as part of planning applications for residential and commercial developments. The toolkit has three interrelated components (Design Standards Checklist, Assessment Criteria and Basis for Conditions and Agreements).

RECAP Waste Strategy – This document which is formally known as the Cambridgeshire and Peterborough Joint Municipal Waste Management Strategy published in 2008 which covers arrangements for the management of waste that falls under the control of a local authority (municipal waste),whilst recognising the potential 'wider waste' role of local authorities influencing non-municipal waste e.g. commercial and industrial waste. The strategy also includes the expansion of the partnership's remit to include environmental protection, including littering and fly tipping.

Recycling (of waste) – Involves the reprocessing of wastes, either into the same material (closed-loop) or a different material (open loop recycling). Commonly applied to non-hazardous wastes such as paper, glass, cardboard, plastics and metals. However, hazardous wastes e.g. solvents can also be recycled by specialist companies, or by in-house equipment.

Reduction (of waste) – this is reducing the amount of waste which is generated. Refuse Disposal (Amenity) Act 1978 – This act sets out the duties of Waste Disposal authorities and Waste Collection Authorities in relation to the disposal of certain types of municipal waste.

Residential Storage Point – This is where waste from residential developments is stored e.g. within boundaries of the house. Please see part 5 of the Guide for further details.

Residual Waste – The waste for disposal remaining after the recovery, recycling or treatment of municipal waste sent for disposal.

Reuse (of waste) – Using materials or products again, for the same or different purpose, without reprocessing the material.

Section 106 Agreements – these are legal agreements which are negotiated between local planning authorities and developers to ensure that development is acceptable in planning terms and which are commonly known as planning obligations. In the context of this SPD the use of these agreements would relate to the provision of financial contributions and/or land to develop the existing network of Household Waste Recycling Centres and Bring Sites within Cambridgeshire and Peterborough as appropriate (please see parts 8 and 9 of the Guide for further details). Segregation (of waste) – this is the separation of different types of waste to enable recycling, recovery and/or disposal as appropriate.

Supplementary Planning Documents (SPDs) – cover a wide range of issues on which the planning authority wishes to provide guidance to supplement the policies and proposals in the DPDs. They will not form part of the Development Plan or be subject to independent examination, but their programme of preparation must be set out.

Underground bring site – These sites comprise a number of posting units above ground to allow for the collection of materials for recycling. Please see part 9 and Appendix G of the Guide for further details.

Underground storage systems – These are an alternative way of storing waste below ground which typically consists of containers which are concealed from view at street level and are accessed through a lift mechanism. Please see part 6 and Appendix A of the Guide for further details.

Waste Audit – A formal structured process used to identify the type, composition and quantity of waste that will be produced during the construction and occupation phases of a development, usually forming part of a wider waste management strategy.

Waste Collection Authority (WCA) – A local authority (a district, city or unitary council) duty to collect municipal waste in its area. Both the Cambridgeshire Districts and Peterborough City Council are Waste Collection Authorities.

Waste Disposal Authority (WDA) – A local authority (a county or unitary) responsible for the management of the waste collected and delivered to it by constituent collection authorities. The processing and/or final disposal of the waste is usually contracted to the private sector waste management industry. Both Cambridgeshire County Council and Peterborough City Council are Waste Disposal Authorities.

Waste Electrical and Electronic Equipment Regulations (WEEE) 2006 – regulations which are intended to both reduce the amount of electrical and electronic equipment being generated and to encourage everyone to re-use, recycle and recover these items.

Waste Hierarchy – The Government's framework for securing a sustainable approach to waste management, e.g. reuse of waste is preferable to landfill.

Waste Management – Waste management is education, regulation, collection, transport, processing, recycling or disposal, and monitoring relating to waste materials.

Waste Planning Authority (WPA) – This is the local authority responsible for the preparation of a Development Plan relating to waste and the determination of waste related planning applications e.g. Household Waste Recycling Centres. Both Cambridgeshire County Council and Peterborough City Council are Waste Planning Authorities.

Waste Strategy – A strategy for dealing with waste arising from the proposed development in accordance with the principles of the waste hierarchy, including specific measures to be incorporated into the developments design. The Strategy is likely to incorporate a Waste Audit and SPD Compliance Toolkit.

Wormeries – Similar to a home composter but where specific worms are introduced to aid the decomposition of the waste material. Please see Appendix C of the Guide for further details.

Developers
minimum standards
Checklist

GREATER CAMBRIDGE
SHARED WASTE

Developers minimum standards check List **Please refer back to the relevant section within the guidance when completing this document.** (Developers are advised to **review ALL of the guidance** as the points in this checklist are just a selection of key requirements)	**Standard Met?** **YES / NO / NA**	**Notes:**
1. External storage containers (pages 8, 16, Appendix A, B)		
Has the number of containers required been calculated?		
Has sufficient space to accommodate containers been calculated?		
2. Internal storage containers (pages 8, 14, Appendix A, B)		
Has sufficient space to accommodate containers been calculated?		
3. Crew pull distances (pages 14, 17)		
Houses - Are all bins able to be presented kerbside? If not, what arrangements have been made for collection points? Has this been discussed/agreed with the WCA?		
Flats - Are all pull distances for collection crews less than 10 metres from bin store to kerbside collection point?		
Flats - Where any pull distances are more than 10 metres from bin store to kerbside collection point, have alternative arrangements been made with managing agents to transport the bins to the collection points? (Please state what the arrangements are in the notes box.)		
4. Pathways & collection areas (page 17)		
Are paths from bin stores to kerbside collection points direct, smooth and level?		
Do paths from bin stores to kerbside collection points avoid hazards such as parked cars?		
Are gradients between the bin store and collection point no more than 1:12?		
Are steps avoided between the bin store and collection point?		
5. Bin stores (page 16, 17, 18, 19, 24, Appendix A, B, C)		
Has sufficient space been allocated for the number of bins required?		
Does the bin store meet bin store design requirements?		
Do bin store keys/codes/automatic locking systems meet the required standards?		
If bin stores are housed in underground car parks have managing agents been appointed to move bins to the collection point?		

Are bin stores free from parking spaces, parked cars and parking bays?		
Are bins segregated from bike stores or other types of bins eg commercial ?		
Will adequate lighting be provided in the bin store?		
Will external bin store doors be wide enough, do they fold back and have floor bolts and door hooks fitted?		
Will internal doors between accommodation and bin stores be easily accessible and have coded entry systems or similar for residents including those with disabilities ?		
Will bin store doors and walls be protected from damage with metal strips?		
Will dropped kerbs be installed outside bin stores or within 10m of bins store?		
Do bins take the most direct route from bin store to refuse vehicle? And avoid need to move around trees, for example?		
6. Non commercial Bulky items (page 20)		
Has space been planned in to store bulky items prior to collection?		
7. Vehicles and roads (page 10, 11, 12, 21, 22, Appendix D)		
Will all roads be built to adoptable standards?		
If roads will not be built to adoptable standards have designated bin collection points been planned that are on or next to roads built to adoptable standards?		
Are access routes both wide and high enough to accommodate all collection vehicles?		
Is there sufficient clear space around the vehicle to allow efficient operation ?		
Has development design taken into account the risk of residential parking (either on the public highway outside the development site or inside the development) impeding collection vehicle access?		
Are there restrictions on vehicle parking along access routes used by collection vehicles in the development?		
Can collection vehicles turn around in the development or reverse in line with the guidance?		
Have hammer heads, turns and reverse manoeuvre's been avoided where possible?		
If turning heads or hammer heads have not been avoided is there sufficient space to turn without reversing and will parking restrictions be in place where turning heads and hammer heads will be located?		
If bollards will be installed, do they allow easy access and will spacing between bollards be wide enough to accommodate vehicles?		
If barrier systems will be installed will they allow collection crews to access sites easily (e.g. ANPR) and out of hours?		
Will traffic management measures (e.g yellow lines) be in place where the risk of parked cars exists ?		

Are roads free from drainage ditches (Swales)? If not, will there be hard standing areas outside bin stores?		
8. Vehicle tracking documents (page 23, Appendix D)		
Have vehicle tracking documents been designed and submitted which detail the vehicle journey, crew pulling distances, vehicle reverses, collection points, bin store locations, parking, road dimensions and street furniture?		
Has a meeting been arranged with WCA to go through all documents (large developments only)		
9. Underground bins (page 24, 24, 26, Appendix D)		
If the development has high density properties, have underground bins been considered as a priority?		
If underground bins are being considered has the developer consulted directly with the WCA about them?		
Have fill monitoring systems been considered?		
Have maintenance methods and costs been factored into plans?		
Are bin locations free from street furniture e.g. trees and lampposts?		
Will large cardboard be managed during occupation phases?		
Have bin types been considered and discussed with the WCA?		
Has food and garden waste management been considered?		
Are roads sufficient in size for a large collection vehicle and are road surfaces even?		
Are lay-bys beside bins wide enough for a large vehicle to pull in but not wide enough for a car to park?		
Will parking enforcement be in place?		
Are bins close enough to roads and not too close to buildings?		
Have bunker and receptacle lid opening directions been considered?		
Are road bollards or barriers easily accessible by collection crews?		
Has the management of those requiring an assisted collection been considered?		
10. Commercial premises (page 31)		
Bin stores design is the same for commercial properties as it is for domestic properties. Has the developer completed questions on section 5 of this checklist?		

Has the likely level of waste been calculated?		
Will storage space be sufficient to store a minimum of two days waste for two waste streams?		
Will bins be accessible to collection crews 24/7?		
If the store is accessible directly from the street will doors be secured by key-code locks rather than physical keys?		
Can site users enter bin stores through internal doors?		
Has space been planned in to store bulky items prior to collection?		
11. Mixed Use Developments (Domestic and Commercial) (page 17, 32)		
Has segregated waste storage been provided for the commercial and residential elements of the development?		
12. Bring banks (page 29, 30)		
Have bring bank requirements been established?		
Will cardboard skips be required during occupation phases?		